

AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Please modify the paragraph that begins on page 6, line 30 as follows:

The application developer can also provide a client agent 245 having the trace program to the client device 255 225. Like the server agent 255, the client agent 245 provides enhanced functionality independent of the client program 220. The client agent 245 can be implemented, for example, using software code that the client program 220 can process and execute. For an example using the Internet and a Web browser client, the client agent 245 includes executable code that is implemented using JavaScript a scripting language such as the JavaScript™ language code, which is available from Sun Microsystems, Inc. of Santa Clara, CA. To deliver the JavaScript code, the server 210 can, for example, embed the JavaScript code it directly in a Web page or store the code as a separate file that is referenced in a Web page and downloaded by the client program 220 when the client program 220 processes that Web page. The delivery of the client agent 245 can be separate from the delivery of the UI215. As part of the delivery mechanism, the server 210 can use information about the client device 225 and/or the client program 220 to determine an appropriate client agent 245 for that client device 225 and client program 220. For example, a request to the server 210 using HTTP includes information about the client device 225 (e.g., processor type, operating system) and/or the client program 220 (e.g., browser type, browser version). The server 210 receives this information with the request and transmits to the client device 225 a version of the client agent 245 that is compatible with (i.e., can be executed by) the browser type and version included in the information.

Please modify the paragraph that begins on page 9, line 9 as follows:

Optionally, the client device 225 includes a Java an applet for a programming language such as JAVA™, which is available from Sun Microsystems, Inc. of Santa Clara, CA and/or In addition to or in lieu of, the client device 225 also includes an ActiveX control (collectively "active component") that can be executed by the client

program 220. Each active component 260 270 can perform interactive animations, immediate calculations, or other simple tasks without having to send a user request back to the server 205. The client agent 245 can be configured to monitor the execution of instructions at the active component 260 270 and generate a trace output ("active component trace output") when an event occurs at the active component 260 270. The active component 260 270 can also transfer data for the active component trace output to the client agent 245 using a defined API. The client agent 245 can be implemented to integrate the active component trace outputs with trace outputs generated as a result of monitoring the execution of instructions at the client program 220 ("client program trace outputs") to form a client-side trace output. The client agent 245 can then transfer the client-side trace output to the server 210 for integration with the server-side trace output as described above. In an alternative implementation, the client agent 245 transfers the active component trace outputs and the client program trace outputs separately. The server agent 255 receives the trace outputs from the client device 225 and combines the active component trace outputs and the client program trace outputs with the server-side trace outputs in chronological order to generate a single trace output file.

Please modify the paragraph that begins on page 9, line 26 as follows:

In other examples, the client agent 245 and the server agent 255 can be included as part of a client-side framework and server-side framework, respectively. Similar to the client agent 245 and the server agent 255, the client-side framework and the server-side framework are separate from and independent of the server application program 205. The client-side framework and server-side framework provide additional data management functions at client device 225 and server 210 so that the server application program 205 does not have to provide any code or instructions for those additional data management functions. Such additional data management functions can include, for example, data type validation for inputs, error detection and correction schemes, and user input help. The client-side framework and the server-side framework can be implemented using, for example, JavaScript code from a scripting language such as JavaScript™, identified above.

Please modify the paragraph that begins on page 13, line 19 as follows:

Other embodiments are within the scope of the following claims. The following are examples for illustration only and not to limit the alternatives in any way. The techniques described herein can be performed in a different order and still achieve desirable results. Also, although the client agent was described being implemented using a scripting language such as JavaScript™, described above, other languages, including other scripting languages can be used. For example, other scripting languages can include JScript JScript™, which is available from Microsoft Corporation of Seattle, Washington and/or other languages compliant with the European Computer Manufacturing Associations ECMAScript Language Specification. Although the client agent is illustrated as residing in the client program, some or all of the described functionality can be distributed in other portions of the client device. Also, in addition to the examples above, other portions, or even all of the functionality of the client agent can be incorporated into the client program.